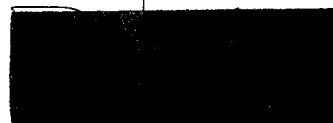




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A  
NALYSIS



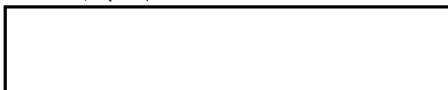
S  
TAFF

PIR

PHOTOGRAPHIC INTELLIGENCE REPORT

VITAL RECORDS COPY

STATUS OF NORTH VIETNAMESE RAILROADS



DECLASS REVIEW by NIMA/DOD

REPORT NO. 29  
CIA/PIR 75093

DATE FEB. 1967

GROUP 1  
Excluded from automatic  
downgrading and declassification

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WARNING

This document contains information affecting the national defense of the United States, within the meaning of Title 18, sections 793 and 794, of the U.S. Code, as amended. Its transmission or revelation of its contents to or receipt by an unauthorized person is prohibited by law.

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DDI IMAGERY ANALYSIS STAFF

PIR 75093

## PREFACE

This report summarizes significant items of photo intelligence relating to the North Vietnamese railroad system which has been developed from available photography (received by the CIA Imagery Analysis Staff) during the period indicated on the cover. This report is intended to provide a comprehensive view of the railroad system and does not necessarily reflect the most recent status changes as reported by pilots' reports or field photo intelligence cables.

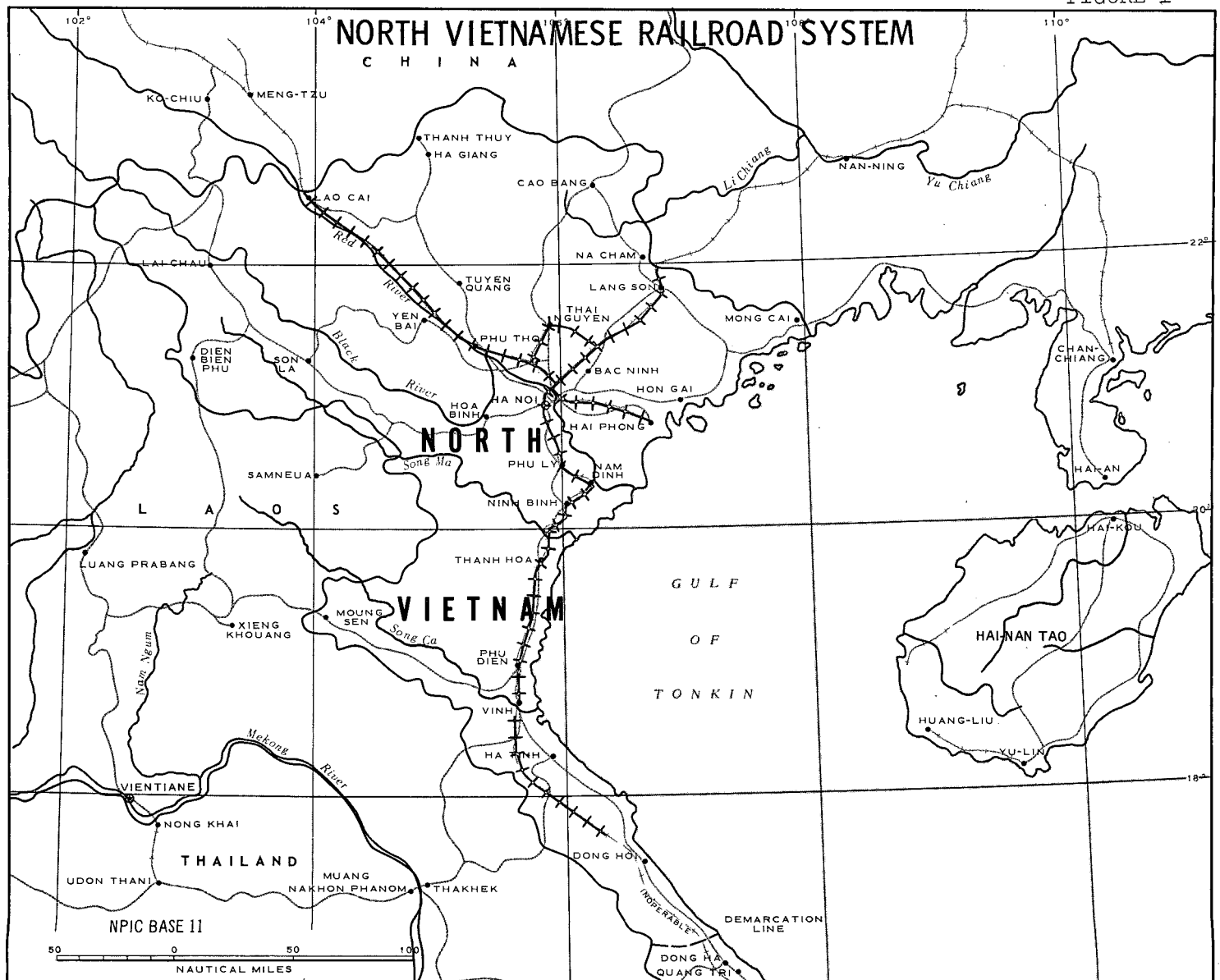
The railroad system has been divided into 5 major lines: the Hanoi/Lao Cai Line, the Hanoi/Dong Dang Line, the Hanoi/Haiphong Line, the Hanoi/Dong Hoi Line and the Thai Nguyen Line (Figure 1). Annotated maps and photos are used to show the status of each line.

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FIGURE 1



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25X1



DDI IMAGERY ANALYSIS STAFF

PIR 75093

## SUMMARY

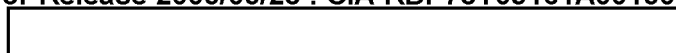
Those portions of the Hanoi/Lao Cai and Thai Nguyen Rail Lines covered by interpretable photography were open to through traffic. One bridge interdiction was noted on the Hanoi/Dong Hoi Rail Line, and a rail-to-rail transloading operation has been observed at the Thanh Hoa Railroad Yards.

## CONTENTS

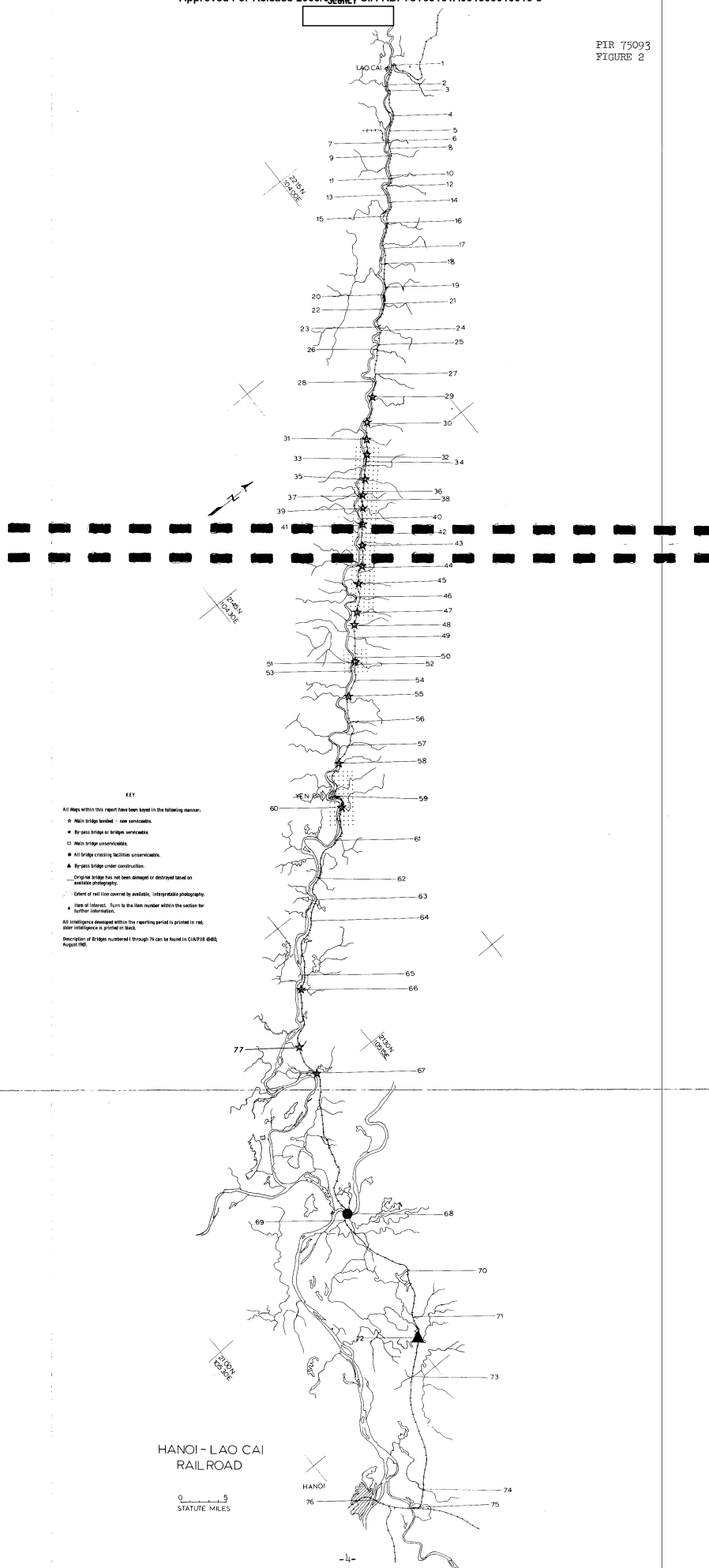
Hanoi/Lao Cai Rail Line	Page 4
Hanoi/Dong Dang Rail Line	8
Hanoi/Dong Hoi Rail Line	9
Hanoi/Haiphong Rail Line	28
Thai Nguyen Rail Line	29

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25X1



PIR 75093  
FIGURE 2



HANOI-LAO CAI  
RAILROAD

0 5  
STATUTE MILES

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25X1

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BRIDGE STATUS CHANGES  
HANOI/LAO CAI RAIL LINE

	<u>Bridge Number and Name</u>	<u>Date Last Observed</u>	<u>Status *</u>
25X1	32 Lang Kay Railroad Bridge NW over Ngoi Key [REDACTED]	[REDACTED]	S
	35 Lang Kay Railroad Bridge over Ngoi Chuc [REDACTED]		S
25X1	37 Lang Kay Railroad Bridge S over Nam Linh [REDACTED]		S
25X1	39 Lang Khay Railroad Bridge over Ngoi Kay [REDACTED]		S
25X1	41 Khe Se Railroad Bridge S over stream [REDACTED]		S
25X1	43 Trai Hut Railroad Bridge NW over Ngoi Cho [REDACTED]		S
25X1	44 Trai Hut Railroad Bridge over Nam Lam [REDACTED]		S
25X1	45 Som Dong Dep Railroad Bridge over Nam Muoi [REDACTED]		S
25X1	47 Lang Quach Ngoai Railroad Bridge N over Ngoi Vai [REDACTED]		S
25X1	48 Lang Quach Ngoai Railroad Bridge over Ngoi Quach [REDACTED]		S
25X1	51 Pho Chang Railroad Bridge over Ngoi Trang [REDACTED]	S	
25X1	55 Pho Hop Railroad Bridge over Ngoi Hop [REDACTED]	S	
25X1	67 Phu Tho Railroad Bridge E over stream [REDACTED]	S	

25X1

\* All data is compiled from photography dated [REDACTED] or thereafter.

Symbols: S = serviceable, U = unserviceable

25X1

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25X1

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25X1

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PIR 75093

ITEM OF INTEREST NO. 1: Hanoi/Lao Cai Rail Line

NAME : Yen Bai Railroad Yard

BE

: [REDACTED]

COORDINATES : 21 42N - 104 53E, VJ880996

PHOTO REFERENCE

: [REDACTED]

25X1

MAP REFERENCE

: JOG (A) 1501, NF 48-10

Damage from previously reported U.S. airstrikes (Report Nos. 21 and 23, November and December 1966) has been repaired and the Yen Bai Railroad Yard is once more serviceable. On [REDACTED] the yard contained 1 locomotive, 11 empty gondola cars, 15 loaded gondola cars, 4 flat cars, and 11 box cars (approximately), all of which are serviceable. A train consisting of a locomotive and tender, 8 box cars, 2 empty gondola cars, and 1 loaded gondola car was entering the yard from the south.

Extensive vehicular track activity adjacent to the rail yard strongly indicates that transshipment activity is presently occurring.

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25X1

[REDACTED]

25X1

PIR 75093  
FIGURE 3

VEHICULAR TRACK ACTIVITY

TRUCKS

U/I BULK MATERIAL

SERVICEABLE TURNING WYE

ROLLING STOCK

- 2 LOCOMOTIVES
- 1 TENDER
- 19 BOX CARS
- 29 GONDOLA CARS
- 4 FLAT CARS

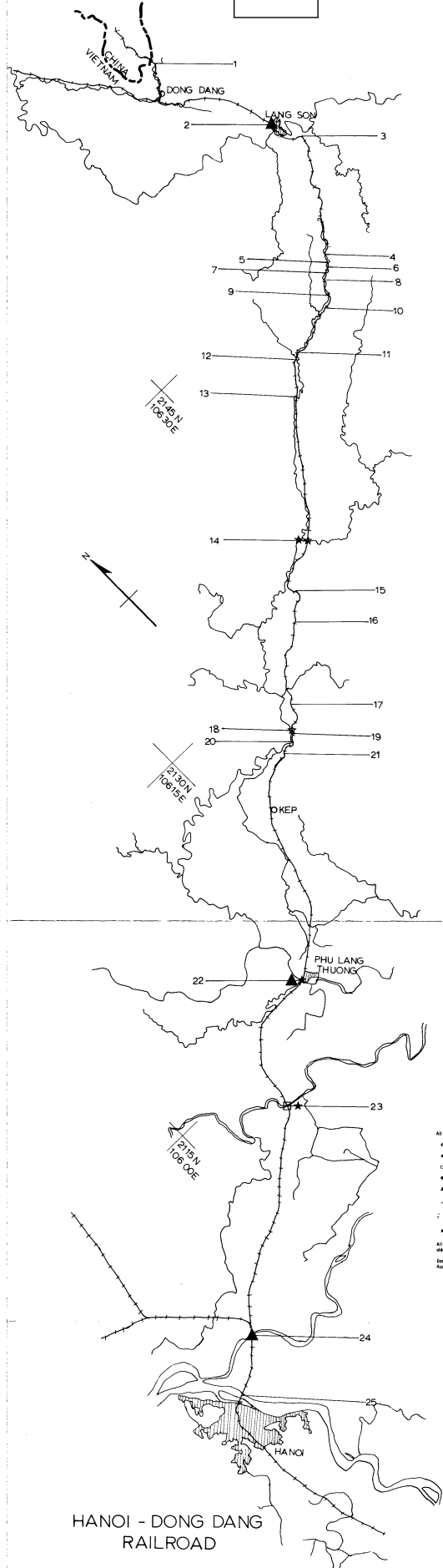
TRAIN ENTERING YARD

-7-

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25X1

PIR 75093  
FIGURE 4



KEY

All Maps within this report have been issued in the following manner:

- Main bridge location - new construction.
- By-pass bridge or bridge construction.
- Main bridge construction.
- All bridge crossing facilities, unconstructable.
- By-pass bridge under construction.
- Original bridge has not been damaged or destroyed based on available photography.
- 2. Color of red line colored to indicate, (repaired) photography.
- 3. Line of interest. Turn to the line number within the section for further information.
- 4. Intelligence developed within this reporting period is printed in red, other intelligence is printed in black.

Description of Bridges numbered 1 through 25 can be found in CIAPIR 804, August 1965.

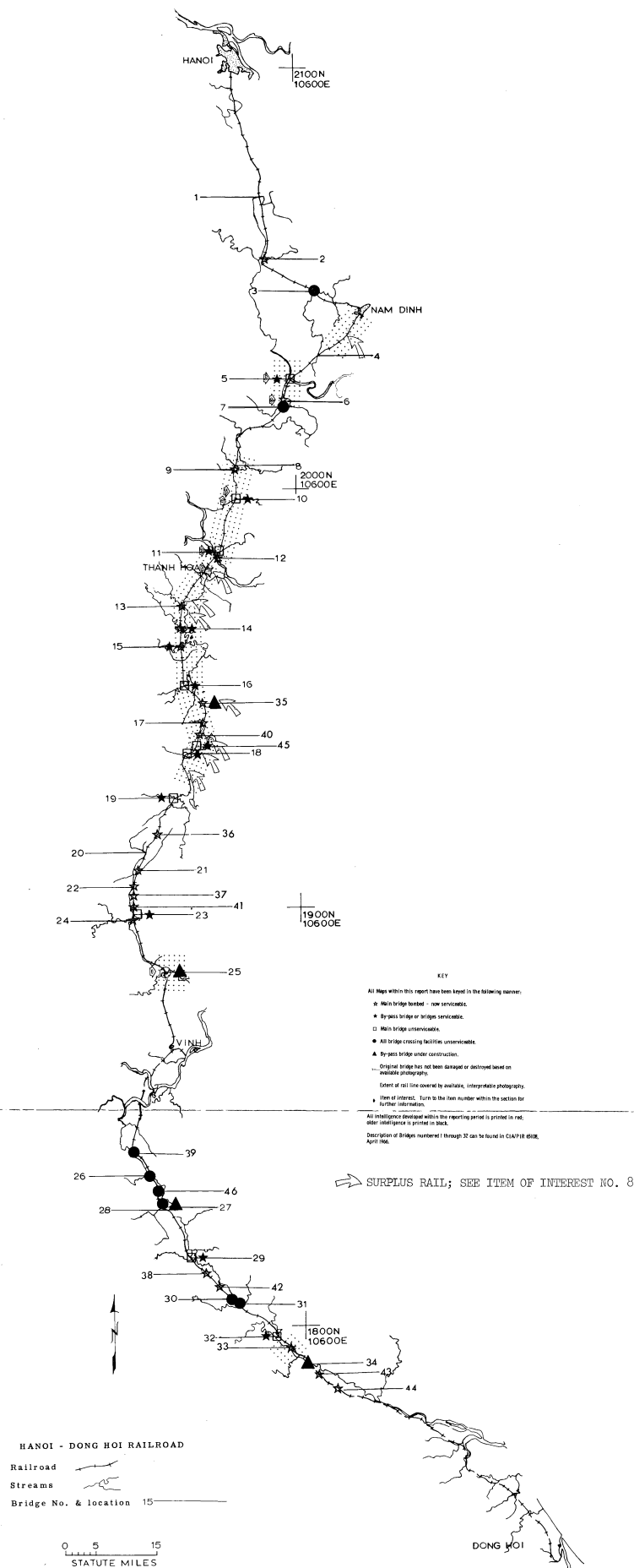
HANOI - DONG DANG  
RAILROAD

0 5 10  
STATUTE MILES

RAILROAD  
STREAMS  
BRIDGE NO. & LOCATION

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PIR 75093  
FIGURE 5-9-  
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25X1

DDI IMAGERY ANALYSIS STAFF

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BRIDGE STATUS CHANGES  
 HANOI/DONG HOI RAIL LINE

	<u>Bridge Number and Name</u>	<u>Date Last Observed</u>	<u>Status *</u>
5	Ninh Binh Railroad and Highway Bridge over Song Day [REDACTED]	[REDACTED]	U
5	Ninh Binh Railroad Bridge over Song Day [REDACTED]		S
5	Ninh Binh Railroad Pontoon Bridge		U
6	Ha Thon Railroad and Highway Bridge over Song Vac [REDACTED]		S
9	Yen Xa Railroad and Highway Bridge over stream [REDACTED]		S
10	Dong Phong Thuong Railroad and Highway Bridge over Song Len [REDACTED]		U
10	Dong Phong Thuong Railroad Bridge S over Song Len [REDACTED]		S
10	Dong Phong Thuong E Railroad By-Pass Bridge [REDACTED]		U
11	Phuong Dinh Railroad Bridge over Lach Truong [REDACTED]		S
11	Phuong Dinh Railroad and Highway Bridge over Lach Truong [REDACTED]		S
12	Thanh Hoa Railroad and Highway Bridge over Song Ma [REDACTED]		S
13	Thien Linh Dong Railroad Bridge over Hoang Giang [REDACTED]		S
13	Thien Linh Dong Railroad Bridge SW over River [REDACTED]		S
14	Thinh Lac Railroad Bridge over stream [REDACTED]		S
14	Thinh Lac Railroad Bridge SSW over stream [REDACTED]		S

25X1

-10-

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25X1

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	<u>Bridge Number and Name</u>	<u>Date Last Observed</u>	<u>Status *</u>
25X1	15 Truong Quang Tien Railroad Bridge over Song Yen Tr [REDACTED]	[REDACTED]	U
25X1	15 Truong Quang Tien Railroad Bridge E over River [REDACTED]		S
25X1	16 Thi Long Railroad Bridge over Suoi Cay Gang [REDACTED]		U
25X1	16 Thi Long Railroad Bridge SW over Suoi Cay Gang [REDACTED]		S
25X1	17 Phu Quat Railroad Bridge over stream [REDACTED]		S
25X1	17 Phu Quat Railroad Bridge NW over stream [REDACTED]		Abandoned
25X1	19 Qui Vinh Railroad Bridge No. 1 over Song Hoang Mai [REDACTED]		U
25X1	19 Qui Vinh Railroad Bridge No. 2 over Song Hoang Mai [REDACTED]		S
25X1	19 Qui Vinh Railroad Bridge No. 3 over Song Hoang Mai [REDACTED]		U
25X1	19 Qui Vinh Railroad Bridge No. 4 over Song Hoang Mai [REDACTED]		S
25X1	25 Tam Da Railroad and Highway Bridge over Song Cua Lo [REDACTED]		U
25X1	35 Thi Long Railroad Bridge SE over stream [REDACTED]		S
25X1	36 Tho Trang Railroad Bridge over stream [REDACTED]		S
25X1	40 Qui My Railroad Bridge over stream [REDACTED]		S

\* All data is compiled from photography dated [REDACTED] or thereafter.

Symbols: S = serviceable, U = unserviceable

-11-

SECRET

25X1

~~SECRET~~

25X

DDI IMAGERY ANALYSIS STAFF

PIR 75093

ITEM OF INTEREST NO. 1: Hanoi/Dong Hoi Rail Line

NAME : Tam Da RR. and Hwy. Bridge

BE

:

COORDINATES

:

18 50N - 105 39E, WF691839

PHOTO REFERENCE

:

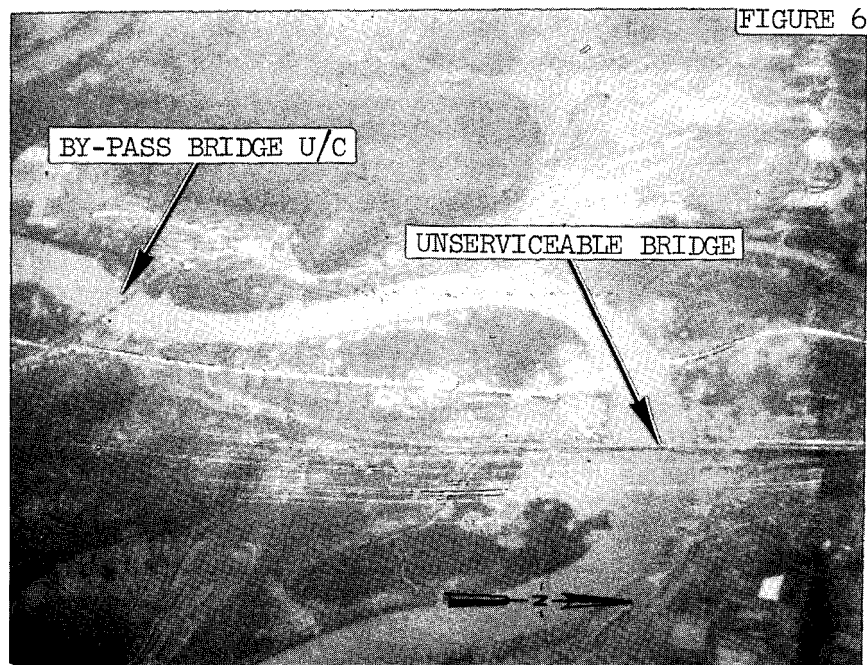
MAP REFERENCE

:

JOG (A) 1501, NE 48-7

25X

Approximately 4 spans of the probable 12-span, deck-beam Tam Da Railroad and Highway Bridge have been destroyed. The by-pass bridge is also unserviceable.



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25X1

PIR 75093

DDI IMAGERY ANALYSIS STAFF

ITEM OF INTEREST NO. 2: Hanoi/Dong Hoi Rail Line

NAME : Thanh Hoa RR. Yards

BE 25X1 : [REDACTED]

COORDINATES : 19 48N - 105 46E, WG807906

PHOTO REFERENCES : [REDACTED]

25X1

MAP REFERENCE : JOG (A) 1501, NE 48-3

An analysis of the distribution of rolling stock and materials held in open storage in the Thanh Hoa Railroad Yards has lead to the conclusion that this yard is being used as a major transloading area.

The railroad yard is located at the western edge of Thanh Hoa and consists of a 4-track yard with 2 by-passes and 2 dead-end spurs.

25X1

On [REDACTED] (Figure 7), heavy, conventional rolling stock is noted on the dead-end spur located at the northern edge of the yard and on the northern portions of the 2 by-passes. Light, 2-axle rolling stock is noted on the dead-end spur on the southern edge of the railroad yard and on the southern portions of the 2 by-passes. The rolling stock is more evenly distributed on [REDACTED] although the two different types of cars are still segregated. See Figure 9 for a line drawing of the yard and adjoining tracks, including the distribution of rolling stock and supplies. Large amounts of materials in open storage, including rails, probable steel beams, and probable wooden beams are found along the by-passes, within the yard proper and along the northern dead-end spur (Figures 8 and 9).

25X1

It is probable that heavy, conventional rolling stock pulled by conventional steam locomotives, is transporting materials southward from Hanoi to the Thanh Hoa Railroad Yards and off-loading within the northern portion of the yard. Light 2-axle rolling stock is held in the southern portion of the yard and on unused by-pass tracks south of the yard (Figure 10). These cars, using converted trucks for motive power, subsequently on-load the materials left along the track and probably start their journey southward toward Vinh at dusk.

The purpose of this transloading operation is probably (1) the light construction of the hastily reconstructed bridges south of Thanh Hoa necessitates extremely light rolling stock (see Report No. 9, September 1966 for detailed information concerning the specifications of the 2-axle flat cars), and (2) the smaller rolling stock is easier to conceal or camouflage. Virtually all of the 2-axle flat cars in the Thanh Hoa Railroad Yards on [REDACTED]

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-13-

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25X1

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Approved For Release 2003/03/28 : CIA-RDP78T00167A001300010016-8

PIR 75093  
FIGURE 7

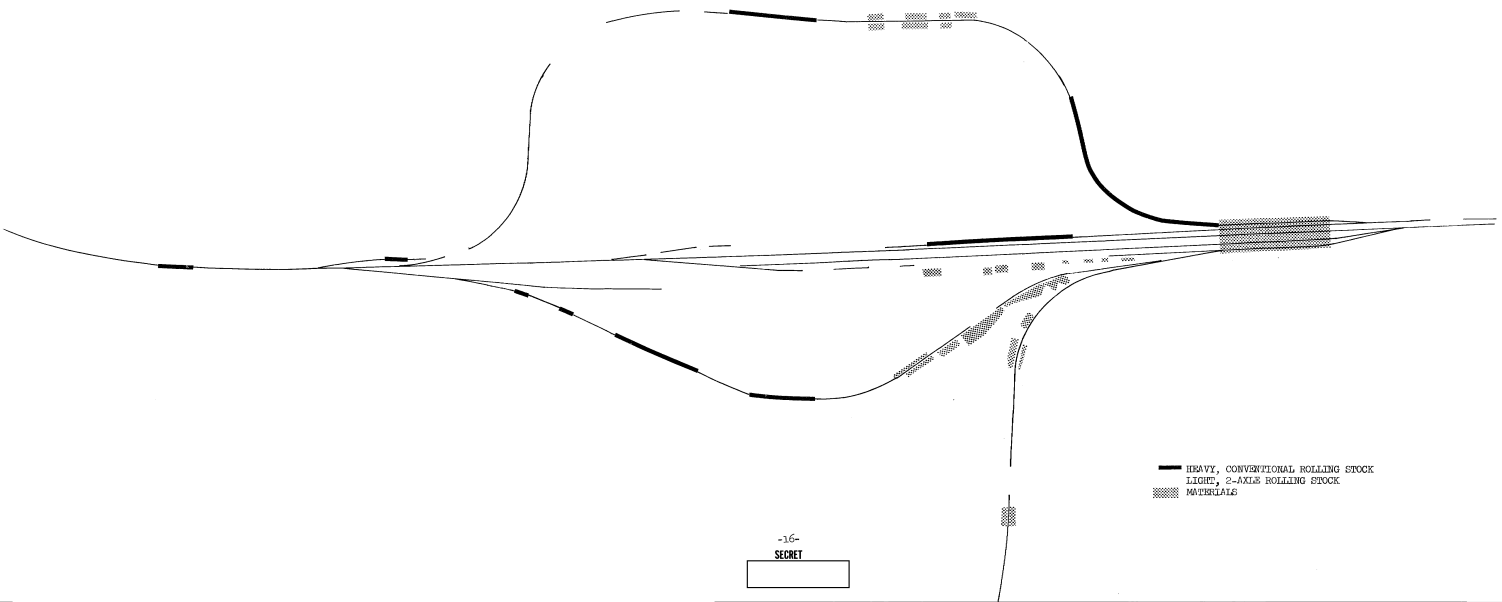
HEAVY, CONVENTIONAL ROLLING STOCK  
LIGHT, 2-AXLE ROLLING STOCK

SECRET



25X1  
25X1

25X1



28 SECRET

PIR 75093  
FIGURE 10

2-AXLE FLAT CARS

THANH HOA - 37 nm

QUI VINH RIVER CROSSING

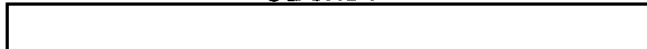
SERVICEABLE BY-PASS TRACKS

-17-

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8 : CIA-RDP78

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DDI IMAGERY ANALYSIS STAFF

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25X1

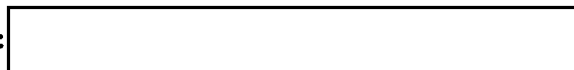
ITEM OF INTEREST NO. 3: Hanoi/Dong Hoi Rail Line

NAME : Phuong Dinh RR. By-Pass Bridge E

BE : NA

COORDINATES : 19 51N - 105 48E, WG842951

PHOTO REFERENCE :



25X1

MAP REFERENCE : JOG (A) 1501, NE 48-3

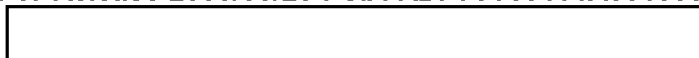
An 8-span, by-pass bridge is under construction approximately 500' east of the currently unserviceable main bridge [REDACTED] and 600' east of a currently serviceable by-pass bridge [REDACTED].

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DDI IMAGERY ANALYSIS STAFF

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ITEM OF INTEREST NO. 4: Hanoi/Dong Hoi Rail Line

NAME : Dong Phong Thuong RR. Bridge E

BE :

COORDINATES : 19 58N - 105 51E, WH890090

PHOTO REFERENCES :

MAP REFERENCE : JOG (A) 1501, NE 48-3

Approximately 7 spans of the deck-beam Dong Phong Thuong Railroad Bridge E have been destroyed and 1 approach has been interdicted (Figure 13). This bridge was serviceable on  (Figure 12). The main bridge  remains unserviceable.

The Dong Phong Thuong Railroad By-Pass Bridge S  has not been damaged but the rail line is interdicted at both ends of the bridge (not illustrated).

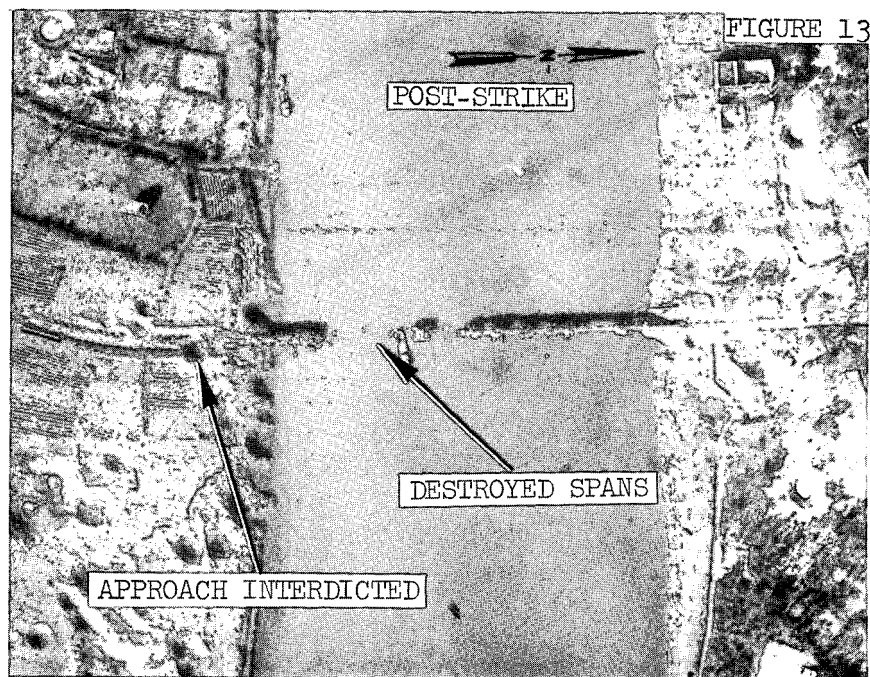
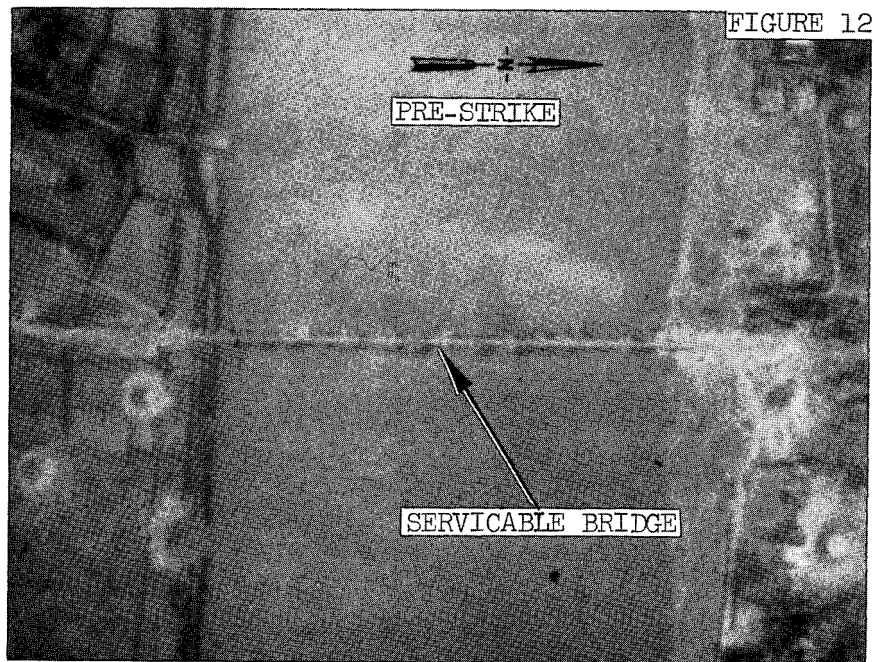
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PIR 75093



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25X

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25X1

DDI IMAGERY ANALYSIS STAFF

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ITEM OF INTEREST NO. 5: Hanoi/Dong Hoi Rail Line

NAME : Dong Phong Thuong RR. Yard

BE : NA

COORDINATES : 19 59N - 105 46E, WH886109

PHOTO REFERENCE :



25X1

MAP REFERENCE : JOG (A) 1501, NE 48-3

25X1

The Dong Phong Thuong Railroad Yard was serviceable on [redacted] (Figure 14). At that time, the yard contained approximately 6 tank cars, 14 probable box cars, 5 gondola cars, and 6 flat cars, all of which were serviceable. Photography of [redacted] (Figure 15) reveals that 1 tank car, 2 box cars, 2 gondola cars, and 6 flat cars have been destroyed or damaged and all through tracks in the yard have been interdicted in several places. One of the choke points has been interdicted. Immediately south of the yard, the two by-pass tracks of the Dong Phong Thuong Railroad and Highway Bridge [redacted] have been interdicted, and at least 5 pieces of rolling stock have been damaged or destroyed on one of them.

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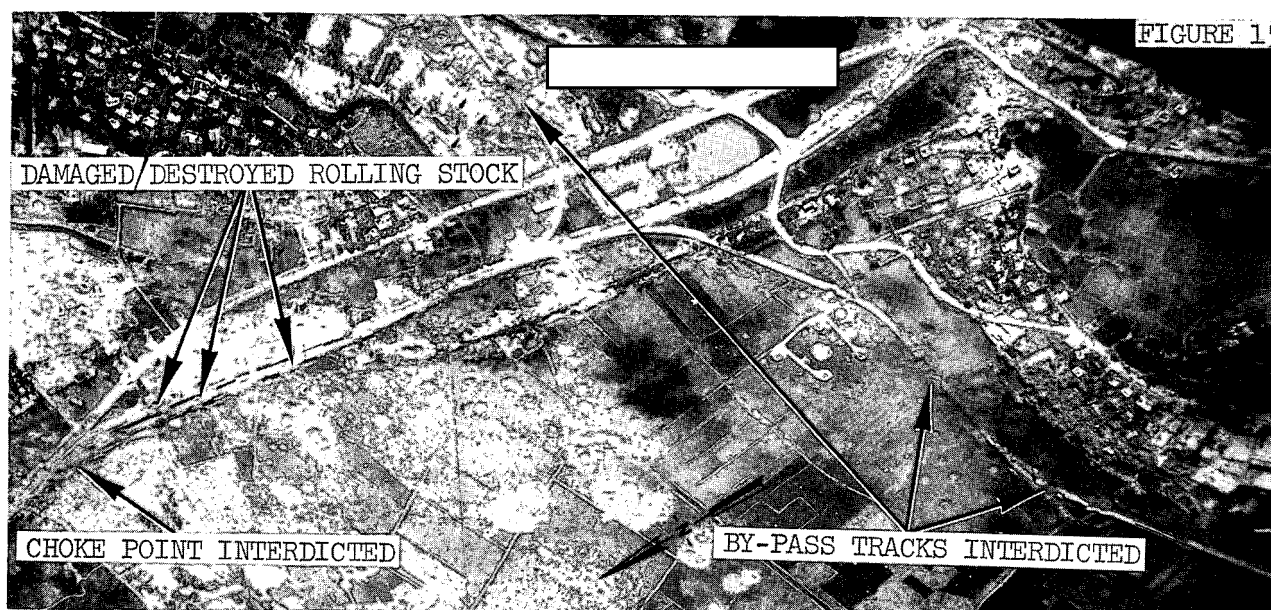
DDI IMAGERY ANALYSIS STAFF

PIR 75093

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DDI IMAGERY ANALYSIS STAFF

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ITEM OF INTEREST NO. 6: Hanoi/Dong Hoi Rail Line

NAME : Ha Thon RR. Bridge

BE 25X1

: [REDACTED]

COORDINATES : 20 12N - 105 58E, XH013348

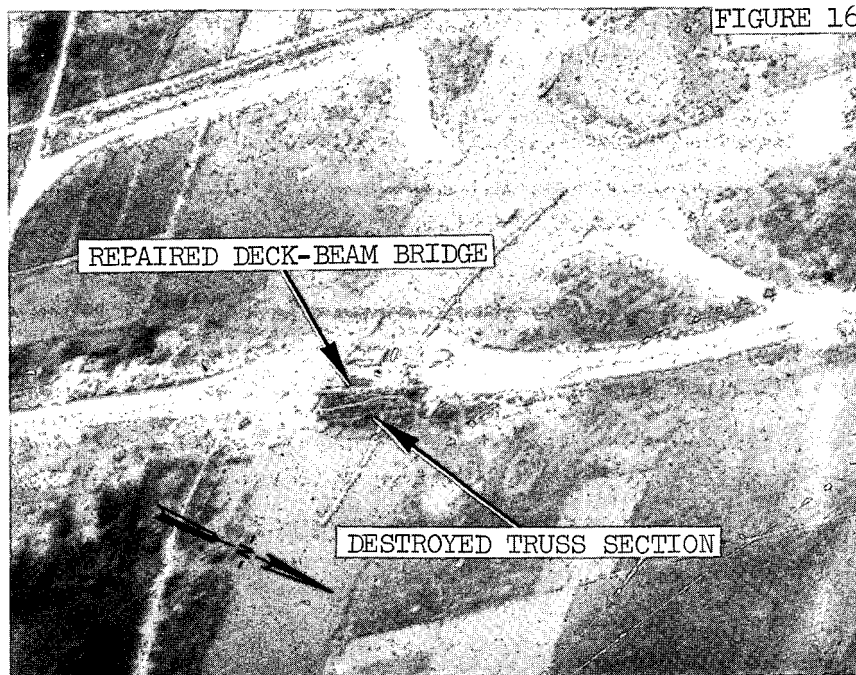
PHOTO REFERENCE

: [REDACTED]

25X1

MAP REFERENCE : JOG (A) 1501, NF 48-15

The probable 3-span, deck-beam Ha Thon Railroad Replacement Bridge has been repaired and is serviceable to through traffic.



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[REDACTED]

25X1

DDI IMAGERY ANALYSIS STAFF

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ITEM OF INTEREST NO. 7: Hanoi/Dong Hoi Rail Line

NAME : Ninh Binh RR. Pontoon Bridge

BE : NA

COORDINATES : 20 15N - 105 59E, XH030405

PHOTO REFERENCES :

[REDACTED]

25X1

MAP REFERENCE : JOG (A) 1501, NF 48-15

25X1

Photography of [REDACTED] reveals a serviceable railroad pontoon bridge (Figure 17) over the Ninh Binh river crossing immediately to the west of the unserviceable main bridge [REDACTED]. This pontoon bridge is presently not being used. The railroad ferry immediately to the east of the main bridge remains serviceable. The rail ferry boat associated with this crossing has been moved from its previous location at UTM XH034400 to a point 2.2 nm (approx.) east of the main bridge at UTM XH073391 (Figure 18).

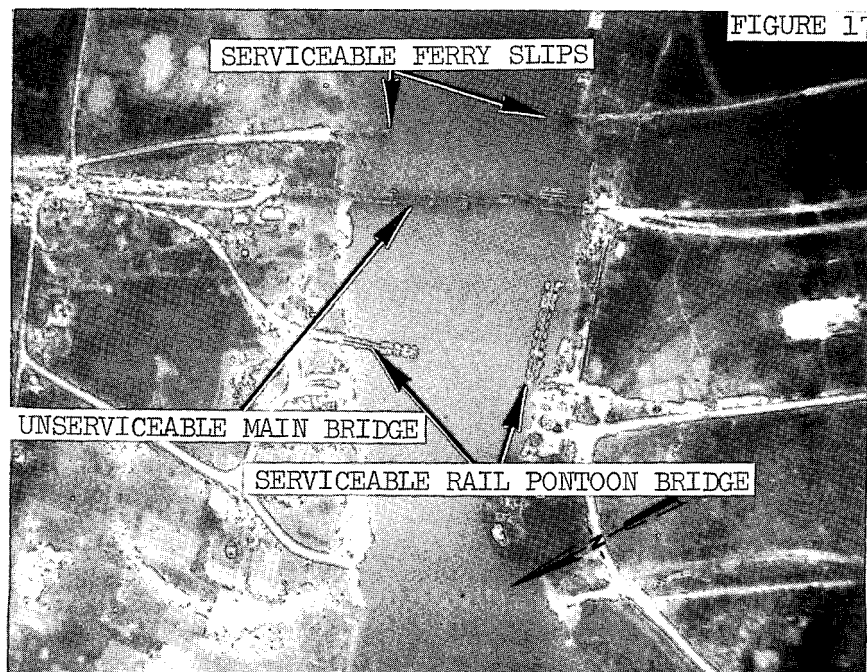
25X1

25X1

On photography of [REDACTED] the railroad pontoon bridge has been struck and is unserviceable (Figure 19). One probable pontoon section has been destroyed and both approaches have been interdicted. The nearby ferry slips are undamaged and a by-pass, the Ninh Binh Railroad Bridge -

25X1

[REDACTED] (not illustrated) remains serviceable.



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[REDACTED]

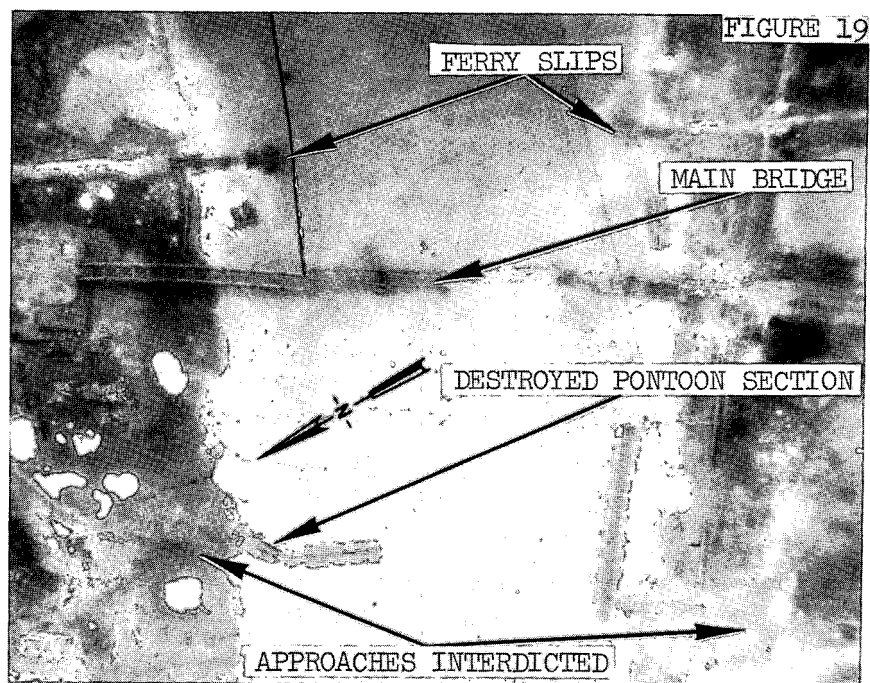
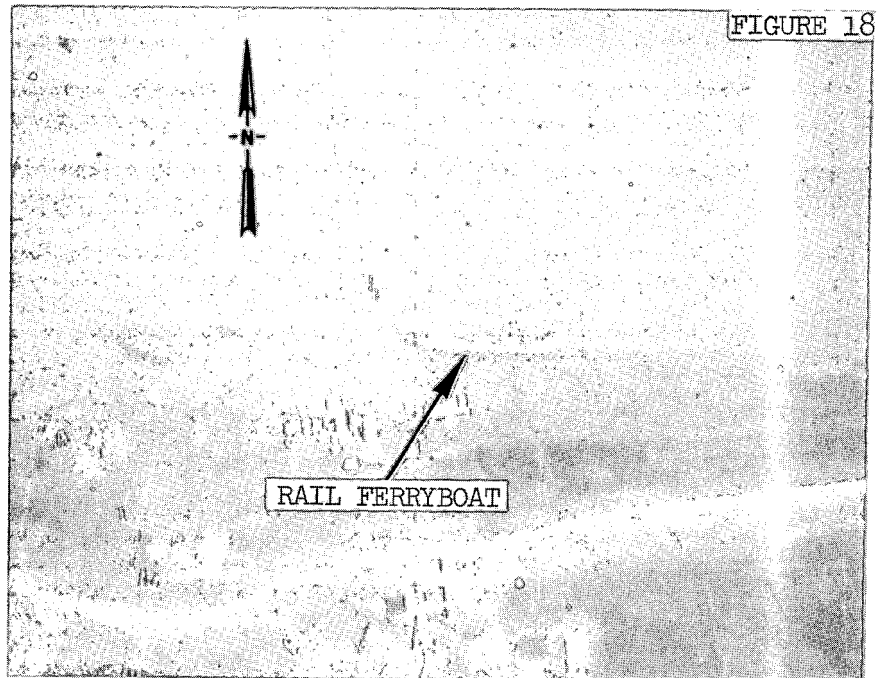
25X1

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25X1

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25X1

DDI IMAGERY ANALYSIS STAFF

PIR 75093

ITEM OF INTEREST NO. 8: Hanoi/Dong Hoi Rail Line

NAME : Construction material

BE : NA

COORDINATES : Various

PHOTO REFERENCES :



25X1

MAP REFERENCES : JOG (A) 1501, NE 48-3  
JOG (A) 1501, NF 48-15

Large quantities of rail have been observed along the Hanoi-Vinh segment of the rail line (Figure 5). The Thanh Hoa Railroad Yards (Item of Interest No. 2) constitute the largest area of rail storage. Surplus rails have also been stacked in quantity at 19 43N - 105 43E (Figure 20) and 20 28N - 105 42E (Figure 21) as well as at 19 22N - 105 44E, 19 24N - 105 44E, and 19 27N - 105 46E. Nineteen motionless flat cars carrying a total of 11 stacks of rail were noted at 19 16N - 105 42E (not illustrated).

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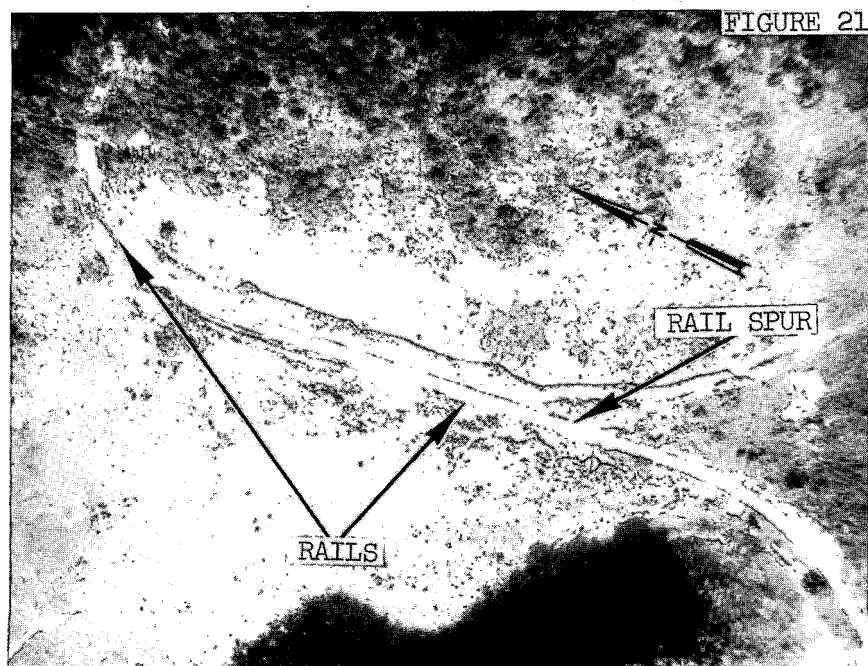
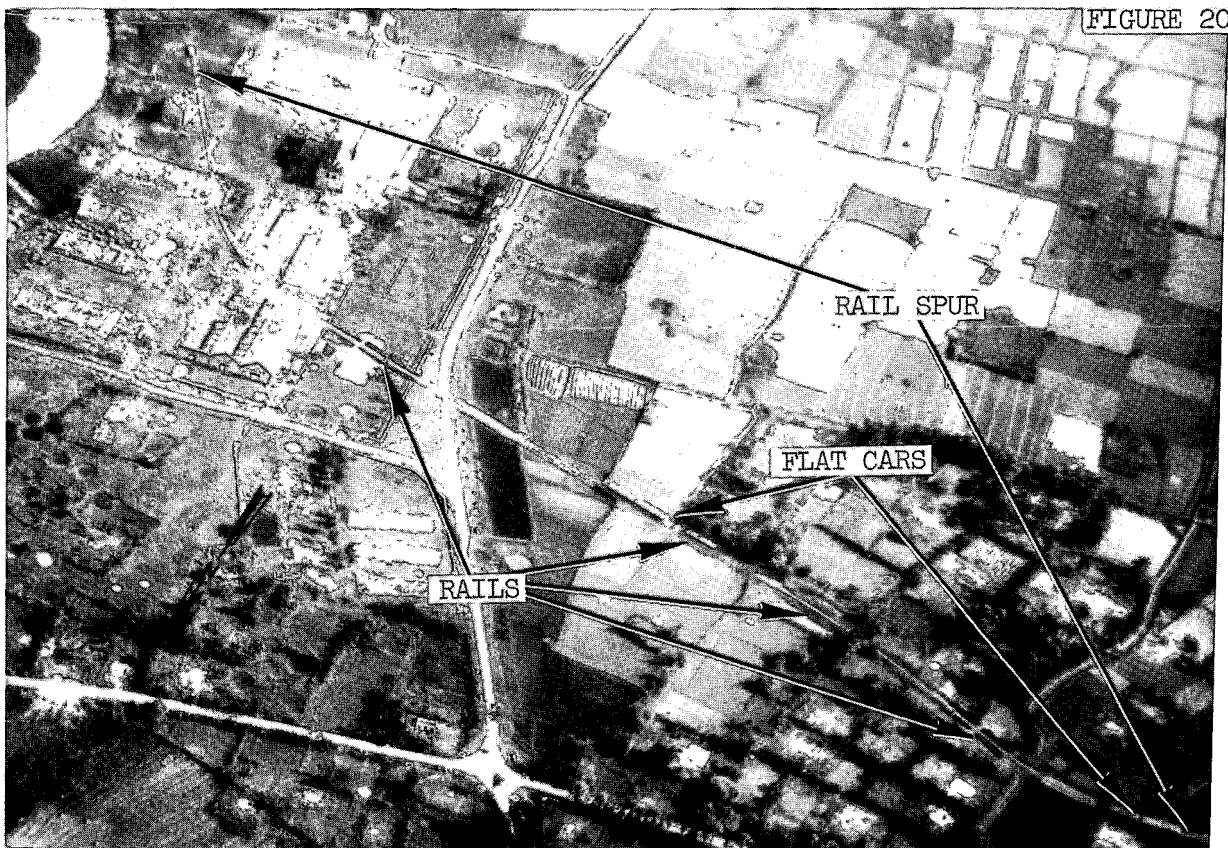
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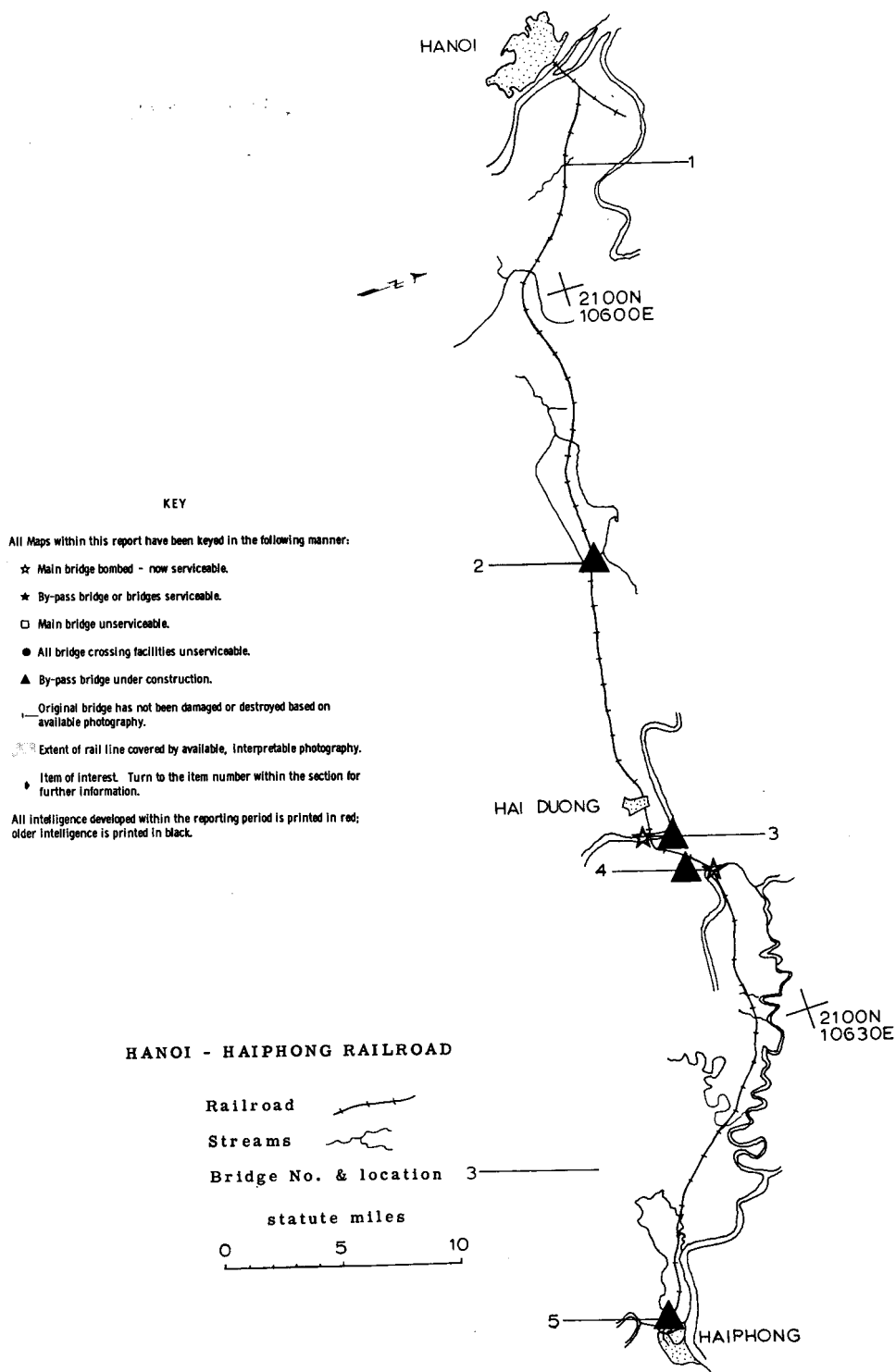
PIR 75093



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FIGURE 22



25X1

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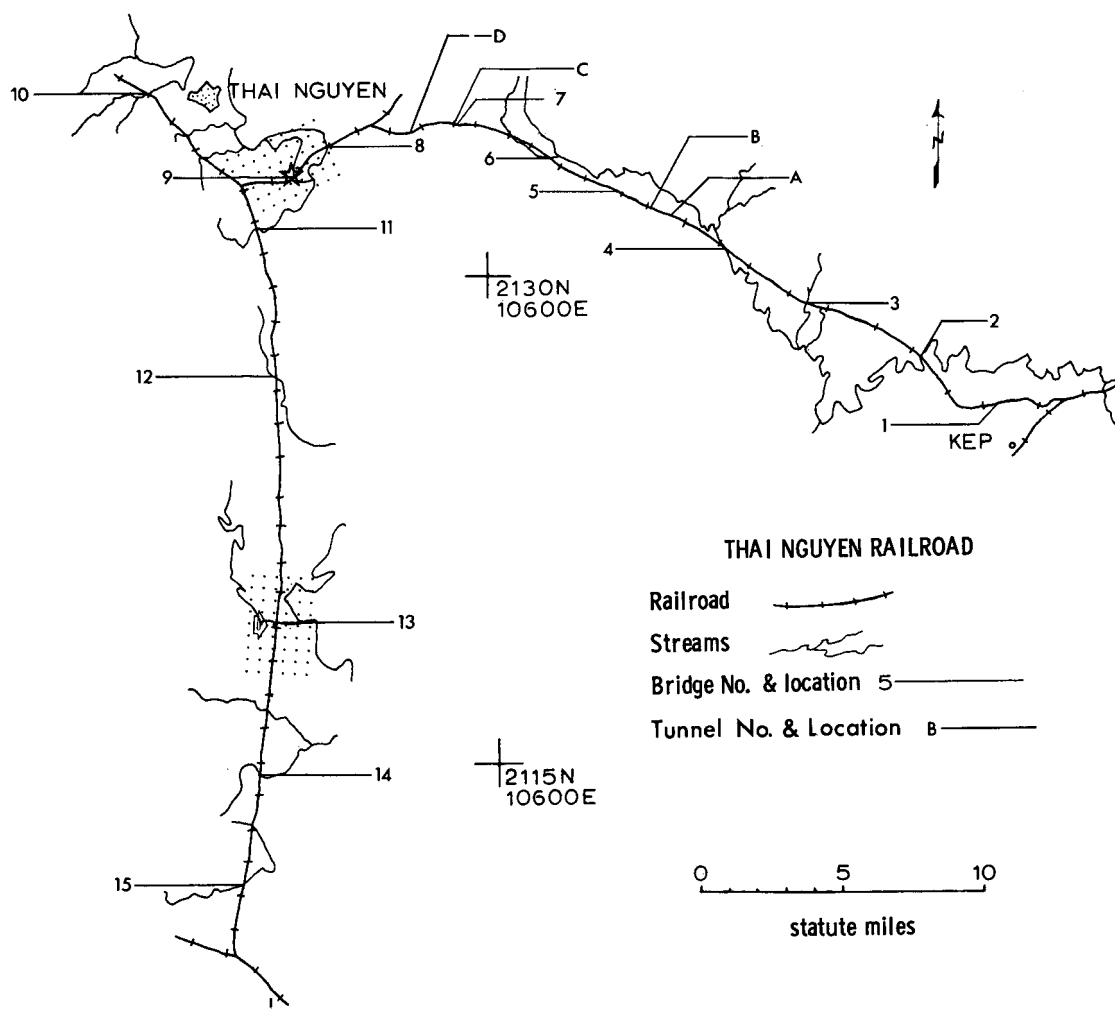
PIR 75093  
FIGURE 23

KEY

All Maps within this report have been keyed in the following manner:

- ★ Main bridge bombed - now serviceable.
- ★ By-pass bridge or bridges serviceable.
- Main bridge unserviceable.
- All bridge crossing facilities unserviceable.
- ▲ By-pass bridge under construction.
- Original bridge has not been damaged or destroyed based on available photography.
- Extent of rail line covered by available, interpretable photography.
- ◆ Item of interest. Turn to the item number within the section for further information.

All intelligence developed within the reporting period is printed in red; older intelligence is printed in black.



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25X1

DDI IMAGERY ANALYSIS STAFF

PIR 75093

BRIDGE STATUS CHANGES  
THAI NGUYEN RAIL LINE

	<u>Bridge Number and Name</u>	<u>Date last observed</u>	<u>Status *</u>
9	Lang Lau Railroad Bridge over Song Cau <input type="text"/>	<input type="text"/>	S
	25X1	25X1	

25X1

\* All data is compiled from photography dated  or thereafter.

Symbols: S = serviceable, U = unserviceable

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25X1

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25X1

DDI IMAGERY ANALYSIS STAFF

PIR 75093

ITEM OF INTEREST NO. 1: Thai Nguyen Railroad Line

NAME : Ha Gia Transloading Area

BE : NA

COORDINATES : 21 19N - 105 53E, WJ915582

PHOTO REFERENCE :  25X1

MAP REFERENCE : JOG (A) 1501, NF 48-11

25X1 The spur line to the Ha Gia transshipment area has been interdicted in 1 place. At least 4 pieces of undamaged rolling stock are located in the transshipping area, indicating that the area has been active. The Ha Gia Railroad Bridge  appears serviceable, although the southern approach has been cratered and repaired.

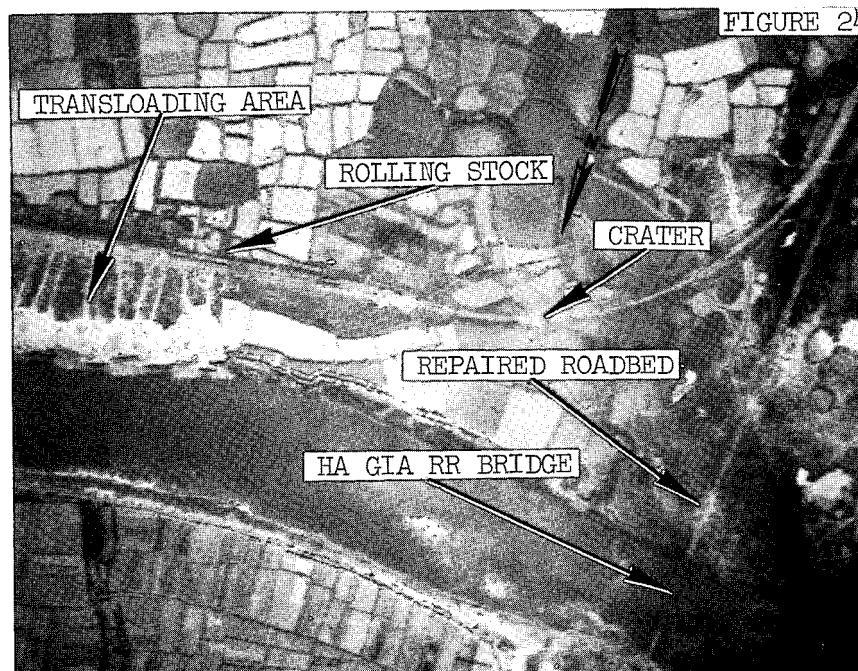
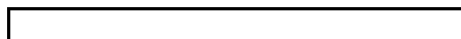


FIGURE 24

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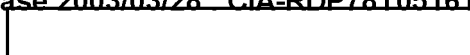
25X1

**SECRET**



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